

Stages and Pennsylvania Special Education Assessment

OVERVIEW

Stages includes two major software components: (a) informal benchmark software and (b) curriculum software. Stages informal assessment software is instructional in nature, providing activities with constructive feedback and opportunities for the learner to explore and choose. Stages curriculum software is a collection of interactive daily instructional programs appropriate for learners at each Stage.

Stages software enhances the Pennsylvania's special education assessment process because:

1. **Stages correlates with the content of Pennsylvania academic standards.**
2. **Stages allows the learner to demonstrate functional skills prior to formal assessment (PSSA and/or PASA).**
3. **Stages assists the learner's IEP and/or instructional teams with creating an appropriate learning and assessment environment.**

1. Stages correlates with Pennsylvania academic standards.

A major IDEA '97 goal is to include all students in statewide assessments and general education curriculum regardless of disabilities. Stages ensures meaningful and effective access to content for Grades K-3 mathematics, reading, and writing, as well as some functional living content. Although PASA is only given to learners at Grades 5, 8, and 11, those learners can benefit from doing Stages activities. The section "How Stages Correlates with Pennsylvania Academic Standards" shows detailed matching between the informal assessment software and specific instructional targets.

2. Stages allows the learner to demonstrate skills prior to formal assessment.

For learners preparing for the Pennsylvania System of School Assessment (PSSA): Information from Stages activities can help the instructor determine an individual student's most appropriate accommodations and modifications. Stages activities and curriculum software give the learner the chance to show understanding and participate in the general curriculum.

For learners preparing for the Pennsylvania Alternate System of Assessment (PASA): Since the PASA is only given once per year, Stages provides a way to help the teacher to gauge learner skill performance between assessments. Using Stages activities, the learner can demonstrate level of performance of skills assessed on PASA. The instructor can use that information to choose practice software activities to strengthen the student's skills prior to the annual PASA administration.

The feedback in Stages activities is encouraging and rewarding, providing a relaxed setting for exploring topics and demonstrating skills on a regular basis. Over time, the learner can become

more accustomed to her performance being recorded, making her responses more candid during observation or recording for PASA.

3. Stages assists the learner's IEP and/or instructional teams with creating an appropriate learning and assessment environment.

In order to administer PASA effectively, the instructor is given freedom to adapt the tasks to make them more accessible to the learner. Some examples of adaptations include: using different materials than the kit, using communication boards or using appropriate devices. An objective of Stages software is to provide several options for input methods and other settings so that the learner's IEP/instructional team can determine his ideal learning and communication environment. Different devices, auditory feedback, speeds and prompts are among the variables.

During Stages software activities, the instructor can print a report with data about the time spent, choices made, response accuracy or work product, input method, prompt type, and time/date stamp are displayed with the learner's name.

Observation guidelines and forms in the Stages kits help the instructor make the most out of an activity session. The data-gathering features of the software enable the observer to focus on noting the learner's behavior and thinking-out-loud responses. Over time, the collected data during these regular activities will build a complete picture of the learner's skill achievement.

SUMMARY

Stages augments the Pennsylvania alternative assessment cycle. The Stages software is a comprehensive tool to assist the instructional team in collecting valuable evidence of completion of IEP-related task performance, determining assessment strategy, and discovering the learner's abilities and thinking approach.

How Stages Correlates with Pennsylvania Academic Standards¹

Students performing at Stages Four through Seven must first have mastered the access, language readiness, and emerging language skills of Stages One through Three. Please refer to the document entitled "A Summary of Stages Research" for an overview of learner abilities expected at each Stage. Performance expectations for Stages Four through Seven are described below.

Stage Four: Early Concepts

Stage Four is a major turning point in the learner's development, both academically and socially. The learner works on traditional readiness skills such as letter identification, counting skills, pattern recognition, and cooperative play.

Stage Five: Advanced Concepts and Communication

At Stage Five, the learner embarks on a lifelong academic journey. Prepared by academic readiness skills in Stage Four, she can now continue her education in all subject areas that are appropriate and interesting to her.

Stage Six: Functional Learning

The Stage Six learner begins to acquire the skills that will allow him to become more independent in the real world. For example, he learns how to dress appropriately, use money, tell time, and read signs.

Stage Seven: Written Expression

The Stage Seven learner is ready to express herself in writing. She can read and identify letters and can now put her thoughts into words. She may ultimately use her writing skills in higher education or at work.

¹ Information found in Title 22, Pennsylvania Code, Chapter 4, Appendix A: Academic Standards for Reading, Writing, Speaking and Listening and Academic Standards for Mathematics, adopted January 16, 1999 (Downloaded PDF file November 1, 2001). Source: <http://www.pde.psu.edu/regs/chapter4.html>
Additional information found at <http://www.pattan.k12.pa.us>

Reading, Writing, Speaking and Listening Grade 3 Academic Standards

Targets for instruction and student learning

STANDARD 1.1.3:

LEARNING TO READ INDEPENDENTLY.

C. Use knowledge of phonics, word analysis (e.g., root words, prefixes and suffixes), syllabication, picture and context clues to decode and understand new words during reading.

H. Demonstrate fluency and comprehension in reading.

- ♦ Read familiar materials aloud with accuracy.
- ♦ Self-correct mistakes.
- ♦ Use appropriate rhythm, flow, meter and pronunciation.
- ♦ Read a variety of genres and types of text.
- ♦ Demonstrate comprehension.

Related Stages Assessment Activities:

Stage Four: Reading Readiness: Letter Sounds, Letter ID

Stage Five: Reading: Sounds (rhyming), Meaning, Context (high-frequency words)

Stage Six: Stories: Cody, Mitchell, Meg, Adam, Ryan

Stage Seven: Making Stories:

Stages Assessment software provides both an alternative means of access to text and a writing tool for the learner to demonstrate the indicated skills. Letter Sounds and ID prepare the learner for phonemic awareness.

STANDARDS 1.2.3:

READING CRITICALLY IN ALL CONTENT AREAS.

A. Read and understand essential content of informational texts and documents in all academic areas.

C. Produce work in at least one literary genre that follows the conventions of the genre.

Related Stages Assessment Activities:

Stage Seven: Making Stories: Stages Assessment software provides both an alternative means of access to text and a writing tool for the learner to demonstrate the indicated skills.

STANDARD 1.3.3:

READING, ANALYZING AND INTERPRETING LITERATURE.

- A.** Read and understand works of literature.
- C.** Identify literary devices in stories (e.g., rhyme, rhythm, personification).
- D.** Identify the structures in poetry (e.g., pattern books, predictable books, nursery rhymes).

Related Stages Assessment Activities:

Stage Five: Reading: Sounds (rhymes)

Stage Six: Stories: Cody, Mitchell, Meg, Adam, Ryan

Stage Seven: Making Words: Rhyming Words

Stages provides reading practice by presenting stories with and without audio narration.

Nursery rhyme structure in the Rhyming activities make use of rhyming patterns to assist with decoding of words while reading.

STANDARD 1.4.3:

TYPES OF WRITING.

- A.** Write narrative pieces (e.g., stories, poems, plays).
- B.** Write informational pieces (e.g., descriptions, letters, reports, instructions) using illustrations when relevant.
- C.** Write an opinion and support it with facts.

Related Stages Assessment Activities:

Stage Seven: Making Stories

Stages provides both an alternative means of access to text and a writing tool for the learner to demonstrate the indicated skills. Illustrations are provided for the learner or custom images may be imported into the writing activity.

STANDARD 1.5.3:

QUALITY OF WRITING.

4. Write with a sharp, distinct focus identifying topic, task and audience.
5. Write using well-developed content appropriate for the topic.
 - ♦ Gather and organize information.
 - ♦ Write a series of related sentences or paragraphs with one central idea.
 - ♦ Incorporate details relevant and appropriate to the topic.
6. Write with controlled and and/or subtle organization.
 - ♦ Sustain a logical order.
 - ♦ Include a recognizable beginning, middle and end.
7. Write with an awareness of the stylistic aspects of composition.
 - ♦ Use sentences of differing lengths and complexities.
 - ♦ Use descriptive words and action verbs.
8. Revise writing to improve detail and order by identifying missing information and determining whether ideas follow logically.
9. Edit writing using the conventions of language.
 - ♦ Spell common, frequently used words correctly.
 - ♦ Use capital letters correctly (first word in sentences, proper nouns, pronoun "I").
 - ♦ Punctuate correctly (periods, exclamation points, question marks, commas in a series).
 - ♦ Use nouns, pronouns, verbs, adjectives, adverbs and conjunctions properly.
 - ♦ Use complete sentences (simple, compound, declarative, interrogative, exclamatory and imperative).

Related Stages Assessment Activities:

Stage Seven: Making Stories

Making Sentences: Spelling and Grammar, Writing Sentences

Stages provides both an alternative means of access to text and a writing tool for the learner to demonstrate the indicated skills. Custom sentences may be entered by the instructor to assess sentence structure, spelling, grammar, capitalization and punctuation in an accessible environment.

STANDARD 1.6.3:
SPEAKING AND LISTENING.

A. Listen to others.

- ♦ Ask questions as an aid to understanding.
- ♦ Distinguish fact from opinion.

B. Listen to a selection of literature (fiction and /or nonfiction).

- ♦ Relate it to similar experiences.
- ♦ Predict what will happen next.
- ♦ Retell a story in chronological order.
- ♦ Recognize a character and tone.
- ♦ Identify and define new words and concepts.

and

STANDARD 1.8.3:
RESEARCH

C. Organize and present the main ideas from research.

- ♦ Take notes from sources using a structured format.
- ♦ Summarize, orally or in writing, the main ideas.

Related Stages Assessment Activities:

Stage Six: *Stories:* Cody, Mitchell, Meg, Adam, Ryan

Stage Seven: Making Stories

Stages provides stories in auditory format for listening and a writing tool for the learner to record research information and express ideas. Additionally, Stages Assessment software provides text-to-speech capability for learners who are non-verbal to allow the learner to participate in group discussions.

Mathematics Grade 3 Academic Standards

Targets for instruction and student learning

STANDARD 2.1.3:

NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS.

A. Count using whole numbers (to 10,000) and by 2's, 3's, 5's, 10's, 25's and 100's.

B. Use whole numbers and fractions to represent quantities.

C. Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols.

D. Use drawings, diagrams or models to show the concept of fraction as part of a whole.

E. Count, compare and make change using a collection of coins and one-dollar bills.

G. Use concrete objects to count, order and group.

I. Apply place-value concepts and numeration to counting, ordering and grouping.

L. Demonstrate knowledge of basic facts in four basic operations.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Counting, Number ID

*Stage Five: Math: Charts and Graphs, Math Facts (+, -, x, /), Word Problems (+, -, x, /)
Problem Solving: Number Guess*

Stage Six: Explore: Using Money

Assess: Money Names, Money Equivalents, Counting Money

Stage Four prepares the learner for counting skills assessment by introducing the concept that numbers represent quantity. Stage Five introduces the concept of fractions and invites the learner to exercise newly acquired problem solving skills in strategy games.

STANDARD 2.2.3:

COMPUTATION AND ESTIMATION.

(1) Apply addition and subtraction in everyday situations using concrete objects.

(2) Solve single- and double-digit addition and subtraction problems with regrouping in vertical form.

C. Demonstrate the concept of multiplication as repeated addition and arrays.

D. Demonstrate the concept of division as repeated subtraction and as sharing.

E. Use estimation skills to arrive at conclusions.

G. Explain addition and subtraction algorithms with regrouping.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Estimating

*Stage Five: Math: Charts and Graphs, Math Facts (+, -, x, /), Word Problems (+, -, x, /)
Problem Solving: Number Guess*

The illustrations in Stage Five serve as virtual manipulatives for problems involving the four basic operations. Additionally, Stage Five allows the learner to use his or her own concrete objects to solve problems without the aid of an illustration.

STANDARD 2.3.3:

MEASUREMENT AND ESTIMATION.

- A.** Compare measurable characteristics of different objects on the same dimensions (e.g., time, temperature, area, length, weight, capacity, perimeter).
- D.** Tell time (analog and digital) to the minute.
- F.** Use concrete objects to determine area and perimeter.

Related Stages Assessment Activities:

Stage Five: Math: Charts and Graphs, Geometry

Stage Six: Telling Time (Explore and Assess)

Comparisons of perimeter and area are addressed in Stage Five, using illustrations. Both analog and digital clocks are included in Stage Six activities.

STANDARD 2.5.3:

MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION.

- A.** Use appropriate problem-solving strategies (e.g., guess and check, working backwards).
- B.** Determine when sufficient information is present to solve a problem and explain how to solve a problem.
- C.** Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil and concrete objects.

Related Stages Assessment Activities:

Stage Five: Math: Math Facts (+, -, x, /), Word Problems (+, -, x, /), Fractions

Problem Solving: Number Guess, Mystery Shape, Mystery Person

Stage Six: Explore: Using Money

Assess: Money Names, Money Equivalents, Counting Money

Problem Solving is fun in Stage Five activities, where the learner participates in games of strategy. These games assess the learner's deductive reasoning ability and give the learner a chance to use mental mathematics. Skills are also applied to real-world situations such as computing money equivalents.

STANDARD 2.6.3:

STATISTICS AND DATA ANALYSIS.

- B.** Formulate and answer questions based on data shown on graphs.

Related Stages Assessment Activities:

Stage Five: Math: Charts and Graphs

Charts and graphs are presented and assessed in the context of a scenario. They are illustrated with appealing graphics.

STANDARD 2.7.3:

PROBABILITY AND PREDICTIONS

D. Analyze data using the concepts of largest, smallest, most often, least often and middle.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Estimating, Spatial Relationships

Stage Five: Math: Charts and Graphs

Relative quantities, positions, sizes are addressed extensively in the activities.

STANDARD 2.8.3:

ALGEBRA AND FUNCTIONS

4. Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number and geometric patterns.
- D.** Create a story to match a given combination of symbols and numbers.
- H.** Describe and interpret the data shown in tables and charts.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Patterns (Create, Explore, Assess)

Stage Five: Math: Charts and Graphs

Stage Seven: Making Stories

The accessible on-screen keyboard in Stage Seven may be used to write math stories. The Patterns activity includes visual and sound effects for students who benefit from multisensory feedback.

STANDARD 2.9.3:

GEOMETRY

- A.** Name and label geometric shapes in two and three dimensions (e.g., circle/sphere, square/cube, triangle/pyramid, rectangle/prism).
- D.** Find and describe geometric figures in real life.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Shape ID (two dimensional shapes)

Shape identification skills are assessed in isolation as well as in real-life scenes at different levels of representation (drawings, photographs).

STANDARD 2.11.3:

CONCEPTS OF CALCULUS

- A.** Identify whole number quantities and measurements from least to most and greatest value.
- B.** Identify least and greatest values represented in bar graphs and pictographs.
- D.** Continue a pattern of numbers or objects that could be extended infinitely.

Related Stages Assessment Activities:

Stage Four: Math Readiness: Estimate, Patterns (Create, Explore, Assess)

Stage Five: Math: Charts and Graphs

Stages Four and Five prepare the learner for future advanced skill building in relative number amounts and pattern recognition.